



Developing an Acceptable Code: A Code of Ethics

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Overview

- **Introduction: Seattle Workshop**
- **Baseline: Assumptions Underpinning a Code**
- **Moving Forward: Key Questions for Discussion**
- **Next Steps**



Seattle Workshop

- Held in Seattle, Washington, March 17th-18th , 2005
- Expanded focus from biology to “life sciences”
- Included representatives from national laboratories, federal agencies, and academia
- Solicited feedback regarding code development and implementation



Seattle Workshop (cont.)

- **Workshop Goals:**
 - Engender discussion on potential content, costs, and benefits of codes of conduct for use in the U.S.
 - Understand the concerns of those working in the life sciences regarding the ramifications of a code
 - Begin a discussion of a process leading to steps for the establishment of any code for life sciences in the U.S.



Overarching Lesson

- Important to introduce scientists to a code of conduct by describing the potential scope of a code and presenting a well-formulated rationale regarding the benefits scientists might receive from a code



Scope of a Code

- **Assumptions underlying an acceptable code**
- **Code Content: Elements of an acceptable code**
- **Institutional Infrastructure: Implement and maintain a code**
- **Stakeholders: Individual and organizational involvement**



Features of a Potentially Acceptable Code

- **Code should not impede scientific discovery while addressing national security needs**
- **Code should be voluntary at the national level; no mandatory enforcement**
- **Code should be rigorous, yet it must be flexible**



Features of a Potentially Acceptable Code (cont.)

- **Code should be assessed periodically and revised as necessary**
- **Implementation of code should be via existing professional scientific societies as opposed to government**
- **Code should use existing infrastructure to implement code when feasible**



Seattle Workshop Suggestions for Code Content

- **Ensure science benefits mankind/does no harm**
- **Ensure right to advance scientific knowledge**
- **Obligate individuals to identify/call out unethical behavior**
- **Obligate individuals to know the quantity and content of material and knowledge they possess and who should be granted access**
- **Consider dual use implications before dissemination of information, knowledge, materials and technology**



Seattle Workshop Suggestions for Code Content (cont.)

- **Ensure peer review for safety, security and ethical implications**
- **Obligate individuals to abide by applicable U.S. laws and regulations, and international treaty requirements**
- **Enable individual's right to refuse participation in unethical science**
- **Communicate the code and code precepts**
- **Ensure code reassessment and reevaluation**



Institutional Infrastructure for Code Implementation

- **Identify existing structures which could be used to develop and maintain a code**
- **Develop leadership and advocacy for code infrastructure**
- **Establish review boards for proposals and publications**
- **Create avenues for individuals or organizations to report concerns**



Institutional Infrastructure for Code Implementation

- **Develop programs for training, education and outreach**
- **Ensure organizational and individual accountability**
- **Ensure accountability for the principles of the code – without undermining support for the code**



Stakeholders

- **Wide range of stakeholders with whom to identify and communicate**
- **Need stakeholder buy-in early in the code development process**
- **Need further discussion regarding impact of code on stakeholders**



Key Questions

- **Burdensome Procedures and Regulations**
- **Feasibility and Effectiveness of a Code**
- **Knowledge Management**



Key Questions (cont.)

- **Authority for deciding research direction**
- **Universality of application**
- **Participation level of scientists**



Potential Benefits

- **Increased Public Confidence through better Accountability**
- **Trigger to Streamline Policies and Procedures**
- **Better Awareness of the Dual-use Applications of Science**
- **Improved Public Communications**



Conclusions

- Several different kinds of codes – codes of practice, codes of conduct, codes of ethics
- Participants agreed that a code should *not* be regulatory in nature – a code *should* raise the individual's awareness of ethical issues
- The sense of the discussion was that a code of ethics, as opposed to a code of conduct, is needed



Conclusion (cont.)

- **Key benefit of a code would be to create a value-driven social norm**
- **Social norm would not strictly enforce or regulate scientific research; it would be similar to the physician's Hippocratic Oath**
- **Signing the code would be voluntary; living according to its principles would not be because the code would create a set of social and scientific standards**



Next Steps in Developing a Code

- **Key components of code development process include:**
 - **Defining scope and goals of code**
 - **Stakeholder communication and education**
 - **Public communication and education**
 - **Developing institutions and infrastructure to support and maintain code**



Next Steps (cont.)

- **A systematic process for developing a code may not be well-accepted**
- **Variety of opinions among workshop participants – need to test conclusions with other stakeholders**
- **Process of code development and implementation may differ**